PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

December 23, 2011



The Honorable Jerry Hill Assembly Member, 19th District P.O. Box 942849 Sacramento, CA 94249-0019

Dear Assemblymember Hill:

Thank you for your October 7, 2011 letter regarding older plastic pipe performance in PG&E's natural gas distribution system. The California Public Utilities Commission (CPUC) is continually reviewing and assessing PG&E's processes in regard to the plastic pipe issue found in the Pipeline and Hazardous Materials Safety Administration advisory bulletins (ADB-99-01, ADB-99-02, ADB-02-07, and ADB-07-02).

The advisories recommend that pipeline operators take steps to monitor Aldyl-A due to its risk of brittleness when placed under stress. We agree that additional steps need to be taken to identify these high risk areas in order to effectively target replacement of the pipes most at risk. We are working to do just that by continuing to highlight this issue with PG&E and the other gas operators, reviewing independent research of Aldyl-A pipe integrity, and focusing on the need for the gas operators to comprehensively map their distribution system and review records to identify where high risk conditions exist for all of the materials in their systems.

We have reviewed steps PG&E took to minimize the risk of Aldyl-A leaks resulting in hazardous conditions. For example, back in 1982, PG&E established a specification for backfill used during pipeline construction projects to require high quality backfill in order to minimize the likelihood of rocks or other objects imposing point loads on the plastic pipe, reducing the risk of the pipe's becoming brittle. Another identified risk factor is when pipe is "squeezed" to shut off the flow of gas in order to perform a repair on the pipe. When the squeeze is released, the point of the squeeze is weakened. In 1987, PG&E began installing reinforcing clamps at squeeze-off points on Aldyl-A pipe manufactured prior to 1973 to prevent hazardous leaks. These were logical first steps to minimize the risks that were later spelled out in the advisories.

Following the 2007 advisory, our staff required PG&E to provide details on its efforts to monitor failure rates related to Aldyl-A pipe. PG&E reviewed and reported its leak rates for Aldyl-A pipes and fittings to us. Staff reviewed the aggregated data and found that leak rates for Aldyl-A pipe was generally in line with trends for leaks in pipes made of other materials and that as a percentage of overall leaks, Aldyl-A materials had not exhibited an increasing leak trend. PG&E's review found that pipe that had been squeezed or subject to rock impingement and other external loading conditions caused the majority of its failures in Aldyl-A pipe.

PG&E also initiated, and recently completed, a testing program to validate its trend analysis for Aldyl-A. The results indicate that the pipe failure rates, due to internal pressure alone, do not warrant a complete replacement of Aldyl-A piping. Our staff reviewed the testing program

methodology, data, and outcome, and agrees that, absent abnormal conditions, Aldyl-A piping is fundamentally strong pipe. In order to best direct its resources to the areas of highest risk, PG&E should (and will) focus on identifying where pre-1973 Aldyl-A is located in its system, identifying work performed that can introduce the risk factors that increase the potential brittleness of the pipe, and actively monitoring its leak information as the best indicator of expected performance of Aldyl-A piping. PG&E has identified initial targets for replacement, including parts of Cupertino and Roseville, where it has begun the permitting process to replace distribution facilities, in light of its preliminary risk analysis. PG&E has also begun discussions about replacement projects with landowners and local officials in St. Helena and Davis in advance of submitting permit applications.

Our staff continues to evaluate and assess the actions taken by PG&E regarding Aldyl-A as part of the Distribution Integrity Management Program (DIMP). As you know, the federal DIMP requirement took effect in August 2011. In preparation for the requirement's taking effect, our staff conducted a preliminary review of PG&E's DIMP in January 2011. A comprehensive review and inspection of PG&E's DIMP will be conducted next year. As part of that review, staff will determine if PG&E's DIMP properly recognizes the enhanced risk of brittle-like cracking in these older polyethylene pipes, demonstrates comprehensive knowledge of the locations of these more vulnerable materials, and identifies activities underway to mitigate this risk. This in-depth review of the DIMP will allow us to evaluate where the risks posed by Aldyl-A pipe rank in comparison to other system risks and to ensure that PG&E is applying its resources appropriately. PG&E's General Rate Case will also be filed in 2012 and that filing will include PG&E's comprehensive action plan to mitigate distribution system risk identified through DIMP.

As we have learned in the wake of the San Bruno tragedy, PG&E has many record management deficiencies to overcome and has recently begun an accelerated effort to improve the management of all of its assets, including distribution assets. PG&E will complete the process of mapping where all the pre-1973 Aldyl-A pipe is located on the Peninsula in March 2012. This will significantly improve PG&E's ability to truly improve the integrity of its system. We are working closely with PG&E to ensure that the new system will also address the needs of first responders, cities and counties, and regulators to understand the utility system and the risks it presents. We continue to push PG&E to provide better information to first responders and local governments so that they understand what facilities are located under their cities and what risks exist.

I thank you for your commitment to gas safety and look forward to working with you to further strengthen our ability to identify risks and prevent a future catastrophic event. If you have any questions, please contact Michelle Cooke, Interim CPSD Director at (415) 703-2349.

Sincerely,

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Paul Clanon Executive Director